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BRAZIL AND THE US: A BRIGHT FUTURE?

BY

LIEUTENANT COLONEL HENRY G. ANTHONY, JR.

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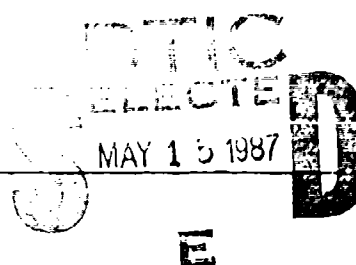
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BRAZIL AND THE US: A Bright Future?

INDIVIDUAL STUDY PROJECT

by

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US Army War College  
Carlisle Barracks, Pennsylvania 17013  
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ABSTRACT

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## CHAPTER 1

### RECENT DEVELOPMENTS

On September 11, 1986, President Jose Sarney addressed a joint meeting of the United States Congress.<sup>1</sup> During his address he stressed the affinities between Brazil and the United States and the progress Brazil is making, under the new democracy then only seventeen months old. He affirmed that Brazil wants to play its part in the international system. He stressed progress in human rights, overcoming the traditional rivalry with neighbor Argentina, participation in the Treaty for the Prohibition of Nuclear Weapons in Latin America, and participation as a member of the Contadora Support Group. Probably the most important issue President Sarney surfaced, was that of Brazil's staggering foreign debt. The foreign debt is over \$110 billion dollars, of which approximately \$27 billion is owed to United States banks. President Sarney cited the progress made in bolstering the economy<sup>2</sup> and made a plea for creditors to look at more reasonable interest payment rules, not only for Brazil, but other debtor countries. President Sarney clearly indicated that his primary responsibility is to the people of Brazil and his most important debts are the social and moral ones facing his country. At the same time Brazil seeks greater world responsibility and a high degree of cooperation with the United States.

This was President Sarney's brief status report on Brazilian progress and the agenda for the future. Since then, in November

1986, the Brazilian Democratic Mobilization Party (PMDB) and Liberal Front Party scored impressive victories in elections giving President Sarney an overwhelming victory.<sup>3</sup> (This victory was seen as a triumph for the Brazilian democratic movement party and an endorsement of President Sarney's policies.)

One of the missions of the newly elected governors and constitution writers will be to rewrite the constitution to replace one promulgated after the 1964 coup. Among issues the new constitution writers will face are: the role of the armed forces; the balance of power between the branches of government; determination of the structure and who has the requisite authority in the government; determination of how the state fits into the economics of Brazil; and, how much latitude should be allowed foreign investors.<sup>4</sup> These elections however have produced a very nationalistic Congress that will probably seek some sort of reschedulement of Brazilian debt payment. (Interest on the debt payment is \$12 billion dollars annually). However, in November, following the elections, there were riots in Brasilia protesting government austerity programs decreed by Sarney. These new measures are part of adjustments made to the Cruzado Plan aimed at cutting the rising inflation rate of the economy. The programs include steep increases in the price of gasoline, telephone and liquor and increases in utility rates as well as divestment of money losing state owed companies.<sup>5</sup> 30,000 government workers were laid off as a result of the policies, while the middle class consumer continues to be hurt most by these policies.<sup>6</sup>



The current government finds itself in crisis as it searches for solutions to solve debt problem that will be both acceptable to its foreign creditors and ones with which the Brazilian people feel comfortable.

#### CURRENT DEMOGRAPHICS

Brazil is the 5<sup>th</sup> largest country in the world (for comparison it is bigger than USA minus a portion of Alaska). It is the 6<sup>th</sup> most populous with 132 million people, which is more than the rest of South America.

The ethnic distribution is 55 percent white, 30 percent mixed, 10 percent black, 4 percent Asian, and one percent Indian. The literacy rate is 70 percent. 70 percent of the Brazilian population live in cities (9 Brazilian cities have a population over 1 million.) The income distribution of Brazilians is skewed. 10 percent of population has 60 percent of the wealth. There is a small upper class and middle class. The poor population is concentrated in urban slums and in the northeast. More than 30 million Brazilians live in poverty with 73 percent of workers earn the equivalent of \$180 US dollars a month or less. It is this segment of the population that Sarney has decided to do something about. 89 percent of Brazilians are Roman Catholics. There are approximately 50 million Brazilians in the labor force of which 40 percent are involved in services, 35 percent in agriculture, and 25 percent in industry.

Brazil has the 8<sup>th</sup> largest Free World Economy which is larger than Venezuela, Mexico and Argentina combined and it is

expected to outstrip Italy and Canada by the late 1990's. The United States is Brazil's largest trading partner. It ranks second, behind the United States, in agricultural exports. It has the largest untapped agricultural lands suitable for planting in the world. Other areas where Brazil ranks largest are: untapped forest reserves; industrial park in the southern hemisphere; river system with 8 rivers larger than the Missouri River; an iron ore mine (Carajas) and untapped iron ore mine reserves. Having 12 percent of the world gold reserves, it ranks 3<sup>rd</sup> in the world. Brazil is 4<sup>th</sup> in gold production. Although a critical lack of oil in 1981 caused high inflation rates, self sufficiency in oil production by early 1990s is expected. It is also the leader in oil substitute fuels (alcohol fuels).<sup>7</sup>

Brazil has the potential of becoming a major supplier of strategic minerals in the next century. It is a world leader in reserves of niobium, tantalum, titanium bauxite, beryllium, manganese, chromate and tin. It is the largest exporter of iron ore in the world and second biggest iron ore producer after the USSR.<sup>8</sup>

The Programa Grande Carajas project is a massive program designed to promote the integrated economic development of an area of 160,000 square miles in the eastern Amazon basin, an area larger than California. This mine will produce 35 million tons of ore per year by 1988.<sup>9</sup>

## CHAPTER I

### ENDNOTES

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2. Brazil: 1985 in Retrospect, AMEMBASSY Brasilia Message, 211501Z August 1986. p. 1. The performance of the Brazilian external sector is strong. Brazil stayed current on all interest payments to commercial banks. The rate of growth of the Brazilian economy was much higher than expected but the high rate of growth is viewed as inflationary. Brazil showed a growth in industrial production of 8.5 percent with a corresponding strong agricultural production. It continues to depend on the U.S. as a market for exports, accounting for 27 percent of total Brazilian exports 1985, down 2 percent from 1984.

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## CHAPTER II

### ECONOMY

Brazil has pursued world status through aggressive economic development. The "economic miracle" encompassed an era of dramatic economic growth during the 60s and 70s. This growth came to an abrupt halt in 1979 during a period of international recession touched off by a dramatic increase in oil prices that thrust Brazil into a severe debt crisis. The very critical lack of oil, at that time, caused inflation of 120 percent in 1981.<sup>1</sup> This need for imported oil, the rapid expansion of the country's economy, and the need to complete large infrastructure projects consumed sizable amounts of national and foreign investments. The Brazilian national debt rose to \$85 billion in 1982, despite dramatic increases in export and trade surpluses. High interest rates, as high as 15 percent charged by the United States and other creditors, intensified the problem. The debt is now approximately \$110 billion dollars, with \$12 billion a year for interest alone.<sup>2</sup>

On 20 February 1987 Sarney announced an indefinite suspension of interest payments owed to foreign lenders. Although this move is not a precedent setting measure and is expected to be a temporary step, the total impact of this move can not now be completely determined.<sup>3</sup> In order to ease some of the financial burden on the country, creditors will be asked to relook interest rates charged for loans.<sup>4</sup> With an easing of the

interest payments, Sarney can focus his attention on promoting economic growth.

Brazil is changing from the stereotyped image as the land of string bikinis, coffee, and carnival, to a complex and sophisticated nation. What follows are only a few examples of the projects and progress that has been made in recent years.

In 1954 Brazil produced no automobiles. In 1980 over a million cars were manufactured by major world multinational corporations. The principal producer of automobiles during the 1980s are: Volkswagen do Brasil, Ford Brasil, General Motors do Brasil, Mercedes Benz do Brasil, Fiat Automoveis, Chrysler Motors do Brasil, and Toyota do Brasil.<sup>5</sup>

Directly tied to the automobile industry is the steel industry. The production of 15.3 million tons of steel in 1980 makes it one of the world's top ten producers in the world.<sup>6</sup>

Brazil has one of the highest levels of government intervention among the market economies in the world.<sup>7</sup> The expanded involvement of the state enterprise in the economy was a reaction to the fear that foreign multinational corporations would dominate the economic sector. State owned industries' deficit spending has placed an additional burden on the country's inflationary economy.<sup>8</sup> Further, government involvement in the economy in capital intensive projects like Carajas and Itaipu and in high technology programs such as the Angra Dos Reis 1 nuclear power plant, contribute significantly to the country's fiscal problems, so that state enterprises replace multinational corporations as the prime target of Brazilian public dissatisfaction.<sup>9</sup>

## STATE OWNED COMPANIES

### Carajas

Carajas is one of the world's richest mineral reserves. Located in the Carajas mountains in the north Brazil, the mine, with full scale production beginning in 1987, is expected to produce 35 million tons per year. The Carajas project has attracted investment from Japan, the European Common Market, and the World Bank for a total of approximately \$1.4 billion. Brazilian investment has been around \$3 billion.<sup>10</sup>

### Itaipu Dam

A very capital intensive project, the dam was inaugurated by then President Joao Figueiredo and Paraguayan President Alfredo Stroessner in 1982. The dam is designed to provide 12.6 million kilowatts of electricity to Paraguay and southern Brazil. In 1983, an agreement was reached with Argentina for the purchase electricity from the hydroelectric project.<sup>11</sup>

### Angra Dos Reis

The signing of a long term nuclear agreement with West Germany includes the construction of eight reactors and fuel cycle equipment, involving an investment of over \$30 billion.<sup>12</sup> Brazil has not been happy with progress to date and is seeking to decelerate the program, and use money saved on more urgent priorities such as fighting poverty.<sup>13</sup>

## ARMS PRODUCTION

Brazil is the largest exporter of arms in the Third World and in 1984 was the seventh leading free world supplier with sales of over \$700 million a year. Leading buyers are Iraq, Libya, Algeria, and the United Kingdom.<sup>14</sup>

It is continuing to develop its arms production capability and is one of the largest manufacturers of wheeled armored vehicles outside the Warsaw Pact. A successful and highly competitive aircraft industry is coproducing with Italy the AM-X Centauro fighter-bomber.<sup>15</sup>

Naval ship building has been hampered by financial problems and the need to import weapons/subsystem technology.<sup>16</sup>

## IMPORTANT ARMS COMPANIES

Engesa - produces approximately half of the wheeled armored vehicles in the free world. Engesa recently introduced a new and impressive 40-ton main battle tank (Osorio). It produces the EE-9 Cascavel, an armored car of world-wide competitiveness, the Urutu, a fully amphibious Armored Personnel Carrier, and the Sucuri armed with an 105mm gun firing fin-stabilized projectiles.<sup>17</sup>

Avibras - produces a modern line of rockets known as ASTROS (Area Saturation Rocket System) and the Sanda Series, and a modern air defense radar system called the FILA (Fighting intruders at Low Altitude).<sup>18</sup>

Embraer - manufacturers commercial and military line of turbo-prop aircraft as well as recent military jet aircraft known

as AMX.<sup>19</sup> Brazil sold over eighty-two Bandeirante turbo-prop commuter aircraft to the U.S.<sup>20</sup>

Imeel - A series of military owned and operated weapons systems and munitions factories.<sup>21</sup>

There are over 350 companies engaged in manufacturing military arms and equipment in Brazil. In addition to the countries already mentioned, arms deals have been made with the following countries: Honduras, Paraguay, Bolivia, Togo, Sudan, Chile, Qatar, Iran, Turkey, and Abu Dhabi.<sup>22</sup>

#### SELF SUFFICIENCY?

Now 70 percent self sufficient in oil production, the country is expected to be totally self sufficient by the early 1990's. Brazil also has the distinction of being the world leader in oil substitute fuels.<sup>24</sup>

#### THE CRUZADO PLAN

On 28 February 1986, President Sarney announced the Cruzado plan, called by some a "shock program."<sup>25</sup> The purpose of the program is to reduce the inflation rate, (which ran as high as 250 percent) under control, stabilize prices and create jobs.<sup>26</sup> Success of the plan will depend on fiscal restraint, reduced spending and making sacrifices coupled with the ability of the government to hold its spending down.

The Cruzado plan is getting mixed reviews. President Sarney claims the plan has resulted in significant economic gains while his detractors say the plan has resulted in serious deficiencies.



Sarney is blaming radicals and financial speculators for some of the troubles facing his government.<sup>27</sup> The fate of the Sarney government rests with the success of the Cruzado plan and its impact on the troubled economy.

#### DIVERSIFICATION

Brazil is working to diversify its economy by moving from an exporter of raw materials such as coffee and orange juice to an exporter of finished good and products, i.e. airplanes, locomotives, etc.<sup>28</sup> It is pursuing a policy of selling its exports to anyone who will buy them, and has launched several initiatives with many countries. Undertaking what it calls a trade offensive with Eastern Europe, it has signed an agreement with East Germany that increased bilateral trade to \$1.5 billion dollars.<sup>29</sup> Cuba is very much interested in purchasing locomotives and formalizing trade agreements between the two countries.<sup>30</sup> Cuba has also sealed a business deal that calls for the sale of Cuban scrap iron for use in manufacture of Brazilian automobiles.<sup>31</sup> A joint venture with the Soviet Union has been discussed calling for the construction of prefabricated housing in some African countries.<sup>32</sup> Discussions are underway with the Japanese government on several cooperation projects and possible loan agreements.<sup>33</sup>

#### U.S. - BRAZILIAN TENSION

Roughly a quarter of the Brazilian debt, approximately \$27 billion, is owed to U.S. banks. Brazil is actively seeking to renegotiate it's debt payment. Renegotiation of the foreign debt

is the most important factor for economic growth.<sup>34</sup> Clearly, Brazil does not want to subjugate itself or damage its sovereignty because of a debt payment. Failure to meet debt repayment schedule or complete denunciation of it could have serious consequences for the United States banking system, and would certainly be the source of increased tension between the two countries. The recent announcement of suspension of interest payments should not have come as a surprise. In his address to Congress in September 1986, Sarney made it clear that he sought relief from the high interest payments and he would do what he thought was best for his country. This announcement should be popular within his country and take some of the pressure off Sarney's government. This move will have an impact in the U.S. banking system and has caused the price of some bank stocks to drop on the New York Stock Exchange. Experts are saying that some banks will lose money, however, it should not cause a crisis. In a Washington Post article, Sarney said, "Brazil was demanding a just negotiation with creditors and the right to grow."<sup>35</sup> It is anticipated that interest payments will be lowered.

Another particularly keen source of tension between the two countries is the Brazilian 1984 Informatics law, which bans all imports of small computers and related technology for eight years. It is estimated that U.S. computer and information technology manufacturers have lost \$2 billion in sales as a result of Brazilian trade restrictions. The Brazilians have claimed sovereignty and political pressures as reasons for

intransigence on the issue.<sup>36</sup> The United States is considering retaliatory actions in the form of restrictions on Brazilian steel, shoes, aircraft and agricultural items. There is some recent indication that Brazil might consider changes in interpretation and administration of the law.<sup>37</sup>

#### REASONABLE EXPECTATIONS?

What are some reasonable expectations the United States might have in in joint economic dealings? The first is repayment of loans owed to our banks. There is indication that this will be done. Secondly, both countries want open markets free of protectionist trade policies. Even though we are Brazil's largest trading partner accounting for 27 percent of its trade, we still place restrictions on imports such as shoes, orange juice and steel. Conversely, the informatics law costs this country's computer industry approximately \$2 billion in lost revenues. With both countries suffering from escalating balance of payments problems, compromise and mutual cooperation are in order.

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## CHAPTER III

### FOREIGN/DEFENSE POLICY

#### BRAZIL'S STRATEGIC PROJECTION-GENERAL

The focus of Brazil's foreign policy is to guarantee markets for its growing national products by seeking steady economic growth and a larger share of the world market. It seeks a stable and peaceful South America and good relations with all nations. Social, health and educational problems are important in the developing world and if ignored by the United States, the Soviet Union might step in and use these problems to its advantage. Following a policy of non-intervention, it seeks peaceful solutions to world problems and will use its influence to lessen tension between the superpower. Because of wide ranging diplomatic interests, it will not automatically align itself with the United States, but will maintain its diplomatic independence.

#### MAJOR TREATIES

Brazil has signed: 1. the Act of Chapultepec which calls for consultation and agreement among signatories to prevent or repel any aggression across boundaries established by treaty;<sup>1</sup> 2. Inter-American Treaty of Reciprocal Assistance (Treaty of Rio) which expands the Act and constrains signatories to settle disputes among themselves peacefully and provides for collective self-defense should any member be subjected to external attack.<sup>2</sup>; The Charter of the Organization of American States, which binds

signatories to settle internal disputes peacefully and take collective action in the event of external attack upon any signatory.<sup>3</sup> It has not signed the Treaty for the Prohibition of Nuclear Weapons in Latin America (Tlatelolco Treaty) which permits the peaceful use of nuclear materials and facilities but bans testing, use, manufacture, production or any acquisition of nuclear weapons.

As a participant in the Contadora Support Group, Brazil is providing moral and political support to the negotiation process. This might be seen as a modest beginning to limited involvement in Central America, a preserve which has been traditionally small. Other than this role, there is no desire to become involved in the Central American crisis, because of fears that such involvement would jeopardize latent economic initiatives, and more broadly, erode its standing in Latin American affairs.<sup>4</sup>

#### SECURITY CONCERNS

Although concerned over the situation in Surinam and the possible unrest in Paraguay after the death of General Stroessner, there is no real external threat to national security. Most problems are settled by treaty. Abiding by a reputation for fairness and negotiations, accords were recently signed with traditional rival Argentina and neighbor to the south, Uruguay.

Staunchly anti-communist, a communist inspired threat to its internal security was eliminated in 1964. Like most large nations, however, there is an active communist party. The



current internal crisis is a result of complications resulting from austerity measures imposed by the Cruzado plan. President Sarney has announced that his government's main efforts will be internal, focusing on the quality of life of its people. Sarney fully recognizes that if Brazil's populations' needs are met there will be less chance of communist inroads among a disgruntled public thus preventing an internal threat to the country's wellbeing. Although not a direct threat to national security, it is nevertheless troublesome.

The inability of its armed forces to protect its interests in the South Atlantic is of major concern. Middle East oil and trade routes pass through the South Atlantic. During an east west global conflict, the South Atlantic has the potential to become an area of confrontation between the superpowers and close these trading routes with a correspondingly dramatic impact on the economy.

The threat is made credible by the rising capability of the Soviet Navy combined with potential Soviet allies on the west coast of Africa i.e. Angola.<sup>5</sup> Although Brazil does not want to be drawn into an east west confrontation it may be forced to do so if its own vital economic and security interests are threatened. There is evidence of an improving antisubmarine warfare capability with the reconditioning of Boeing 707 or C-130 aircraft to AWACs platforms as part of an overall force modernization program which will be addressed in the following chapter.

### MIDDLE EAST TIES

Close economic ties have been developed with Middle Eastern countries, mainly through the arms trade. Along with the delivery of the actual equipment and spare parts; comes the requirements for sending personnel to setup military missions, train the buyers in the use of the equipment, develop doctrine for its use etc. An increasing number of Brazilian families find themselves living in the Middle east and working in their country's corporations. A good portion of Middle East oil is imported and therefore becomes vulnerable when a conflict in the region causes an interruption of oil imports.<sup>6</sup>

### TIES WITH AFRICA

Brazil shares a "common Portuguese heritage" with nations of Africa, and is actively expanding diplomatic and economic ties. The economic ties are similar in nature to the ones enjoyed with the Middle East i.e. expanded markets for goods and services, arms trading, technical assistance and cultural exchanges.

### OTHER

Although heavily involved with the Middle East and Africa it is worth noting that progress is being made for expanding relations with India, Pakistan, the Federal Republic of Germany, France, the United Kingdom and Canada, through official state visits, trade and investment negotiations and a general exchange of political views.

## U.S. EXPECTATIONS?

Above all, the United States wants a solid partner in this half of the hemisphere. Professor Gabriel Marcella, Professor of Third World Studies, United States Army War College, has suggested that the security of the region results from the recognition of mutual interests both by United States and South America, such as solving the debt crisis, and strengthening fragile democratic governments.<sup>7</sup> He also says that, "It is imperative that the United States maintain a cooperative relationship with Brazil as the latter increases its role in the world."<sup>8</sup> The precedent has been set for this relationship with a history of long standing friendship and as an ally during a time of war.

What if the unthinkable occurs and there is an east west confrontation? If Brasil chooses not to become involved by a commitment of its armed forces, the United States would most probably desire access to the abundant amounts of raw materials that would be necessary to sustain a protracted war and access to possible bases or landing rights should the situation dictate. Brazil will commit its armed forces only if it clearly is in her own best interest to do so.

## CHAPTER III

### ENDNOTES

1. The International Institute for Strategic Studies, The Military Balance 1986-1987, pp. 180-181. The Act of Chapultepec signed by Argentina, Bolivia, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the U.S., Uruguay, and Venezuela, in March and April 1945.

2. Ibid. All parties that signed the Act, signed Treaty of Rio, plus El Salvador, Trinidad and Tobago, but except Ecuador and Nicaragua the act came into force in 1948. Cuba withdrew in March 1960. p. 174.

3. Ibid. Signatories include all of the Act, plus Antigua, Barbuda, Barbados, Dominica, El Salvador, Grenada, Jamaica, St. Kitts-Nevis, St. Lucia, St. Vincent, Suriname, Trinidad and Tobago. p. 174.

4. Georgetown University Center for Strategic and International Studies, The Future of the United States Brazilian Relations, p. 2.

5. Alexandre De S.C. Barros. "Brazilian Security Interests in the Eighties", Paper presented at the Seminar for Regional Security and Peace in Latin America at the Institute for International Studies University of Chile, Vina del Mar, Chile, 19-22 November 1984. pp. 10-13.

6. Ibid., pp. 16-18.

7. Gabriel Marcella, "Defense of the Western Hemisphere: Strategy for the 1990's", Journal of inter American Studies and World Affairs, Fall 1985, Vol 27, No. 3, p. 19.

8. Ibid., p. 16.

## CHAPTER IV

### THE ARMED FORCES

#### GENERAL

The Falklands/Malvinas War showed that an international war could take place in South America. Additionally it demonstrated how inadequately prepared the Argentinian forces were for this type of conflict and served as an example for other South American countries. As the Brazilian military disengage themselves from the political arena, they are beginning to modernize their forces in response to a potential external threat. Internal security has been the main focus of the Brazilian Armed forces. The name of this modernization program is called Forca Terrestre (FT-90).<sup>1</sup>

New military bases have been established in remote border areas in the north (Caya Norte), reflecting a concern for developments in Suriname and the Venezuela border disputes, and the possibility of terrorists, such as the M-19 group from Colombia, using sections of the country as base of operations with drug dealers. It is important to note that equipment for modernization of its forces, for the most part, will come from its own arms industry. Although the equipment is known for its ruggedness and reliability, sophisticated technology must come from the United States or from other sources.

In 1984, a joint memorandum of understanding (MOU) on military-industrial cooperation was agreed to with the United

States. The agreement covers the development of technology transfer, trade and joint production.<sup>2</sup> To date however, although Brazil has signed the agreement, no action has been taken concerning the MOU. As possible motive for not signing is Brazilian suspicion that the United States might want to keep Brazilians in the mode of depending on U.S. technology transfers and thus in a form of subserviance. The United States is very reluctant to part with vanguard technology that might be transferred to third countries.

### MILITARY ORGANIZATION

#### Command Organization

The president is the commander in chief of the armed forces under the constitution. There is no ministry of defense, because of navy and air force fears of army domination. The president commands through the Army, Navy and Air Force ministries, each of which is headed by a serving officer. These ministers exercise command over their respective services, acting as general headquarters. The logistical, procurement and distribution systems also are separate for the three services.<sup>3</sup>

#### Total Armed Forces

There are approximately 283,400 Brazilians in the armed forces; 137,000 of these are conscripts. The term of service is 12 months. There are 1,115,000 in the reserves, and 240,000 in the para-military force.<sup>4</sup>

## Army

Army personnel 183,000 but plans call for the army to eventually increase to 296,000. The army is organized into one armored brigade, six mechanized cavalry brigades, nine armored infantry brigades, 21 motor infantry brigades, two AB brigades, one AA artillery brigade, 10 artillery regiments, eight AA artillery groups, five jungle infantry battalions and two engineering groups.<sup>5</sup>

Modernization of the Army will include, among other pieces of hardware, a new main battle tank, a new 155mm self propelled artillery piece, a 300 mm multiple rocket launcher system, and a new air defense weapon system.

## Air Force (FAB)

Air Force personnel number 45,000. Operationally, the air force is divided into five commands: the air defense command, the tactical command, the maritime command, the transport command and the training command.<sup>6</sup>

The Air Force has approximately 180 combat aircraft. The Embraer-built Xavantes remains the mainstay of the Air Force's tactical command. The oldest of the Xavantes are to be replaced by the Brazilian/Italian AMX fighters by 1991 with additional quantities possible for export. The FAB is considering the replacement of the service's Mirage III and F-5 fleets. According to reports from Sao Paulo, Brazil intends to build an air-superiority fighter based on specifications being studied by the air staff requirements branch. Like the AMX fighter, this

program is to be carried out with foreign partners. Brazil is said to be talking with British Aerospace and Pratt and Whitney about codevelopment of a lightweight supersonic fighter to replace the Mirage IIIs and F-5s in the next decade.<sup>7</sup>

Trainers -- Local production of the EMB-312 Tucano (T-27) turboprop trainer is continuing. The FAB has placed firm orders for 118 Tucanos to replace some Neiva T-25 piston-engine aircraft. In early 1985 a Brazilian air force team visited Chile to evaluate Enaer's T-35 Pillan basic trainer.<sup>8</sup>

Brazil has also contracted Boeing to convert 4 commercial airliners to tankers. The Air Force general staff is in the process of analyzing equipment to be used in an Airborne Warning and Control System (AWACs) Aircraft, using a modified Boeing 707 or C-130 aircraft. The aircraft, once developed, will significantly improve surveillance of airspace and supply electronic information for military purposes to the Air Defense and Air Traffic Control System which it now lacks.<sup>9</sup>

The Air Force (FAB) is also participating in a project which will place in orbit the first data collecting satellite by the end of 1989. The project is called Complete Brazilian Space Mission (Missao Espacial Completa Brasileira)<sup>10</sup> The actual satellites (three) will be built by the National Institute of Space Research (INPE), aided in this venture by a French industrial group. This ambitious space program will be used to gather meteorological data, one for photographic data and the last will be used to spot Brazilian natural resources.<sup>11</sup>



## Navy

Navy personnel number 48,000. The navy is divided into six operational districts, the commanders of which exercise full control over the ships, installations and personnel assigned to that district. The six districts are: First (Rio de Janeiro), Second (Salvador), Third (Recife), Fourth (Belem), Fifth (Florianopolis) and Sixth (Sao Paulo).<sup>12</sup>

## Modernization

During the latter half of the 1980's, the Brazilian navy will start to face block obsolescence. Consequently, the navy will receive the lion's share of defense allocations during the next several years. Navy sources have disclosed that the fleet modernization/replacement program will span a 10-year period with total outlays of more than \$15 billion. Some 45-50 vessels in various categories will be involved. All naval requirements are expected to be fulfilled by Brazilian industry through coproduction or licensing agreements with foreign contractors or by indigenous design or construction.<sup>13</sup>

Submarines -- Construction of two 1,400 ton Type 209 submarines designed by the West Germans for the navy is progressing; the first is to be built by Howaldt-Deutsch Werfit in West Germany and the second at the Rio de Janeiro navy yard. They eventually will replace the two ex-US Guppy II class submarines currently in service. The Brazilian navy also plans to acquire nuclear submarines. An indigenous naval reactor is said to be under development and the first Brazilian nuclear-powered submarine might be in service in the next decade.

Admiral Maximiano Fongera, former Navy minister said "A nuclear submarine is essential to us. During the Falklands, three British subs kept the Argentine Navy in port."<sup>14</sup> Recent reports from Sao Paulo claim that the Brazilian Finance Ministry has authorized the navy to take out a \$200 million loan for the construction of three new submarines.<sup>15</sup>

Frigates -- As part of its modernization program the navy plans to build 12 V-28 type frigates. The basic design is understood to have been equipped in Brazil with German assistance, but much of the equipment, especially in the electronic field, will be of British manufacture. The missile armament originally was reported as being the French Aerospatiale Exocet system; it was later reported that 12 Exocet MM38s were ordered. The frigates eventually will replace the Imperial Marinheiro class patrol tug/corvettes built by the Netherlands in the mid-1950s.<sup>16</sup>

Destroyers -- By the end of the decade 12 WWII vintage US-built destroyers of the Gearing, Allen M. Sumner and Fletcher classes will be in need of replacement. These probably will be replaced by a mixture of smaller, new construction frigates and a smaller number of more modern destroyers.<sup>17</sup>

Aircraft Carrier -- The ex-British Colossus class carrier Minas Gerais, which was launched in 1944, will remain operational until at least 1990. However, plans are to build two aircraft carriers. These most likely would be an attack carrier of 35,000 - 40,000 tons and a smaller 15,000-ton carrier to support amphibious operations.<sup>18</sup>

Minehunters -- The Brazilian navy plans to acquire about six fiberglass minehunters of an advanced design.<sup>19</sup>

### NUCLEAR WEAPONS

Why Nuclear Weapons? There may be two motives: first, Argentina, a historical rival is much further along with its nuclear program and secondly, the desire to possess all the trappings of a great power. Brazil did not sign the Nuclear Non-Proliferation Treaty (1968) and has not ratified the TLAITLOCO Treaty (1967) which bans nuclear weapons in Latin America.

Against what country might Brazil use such a weapon? Brazil has followed a policy of non-intervention and disputes with its neighbors are normally settled by negotiations. Recent agreements were concluded with its traditional competitor, Argentina, and with Uruguay. There is no internal, or external threat to its security and the military lacks the capability to "project power." It would appear that even if a nuclear weapon were built the possibility of which it has denied, it seems highly unlikely that Brazil would resort to the use of such a device.

By the end of the 1980's it may have the resources and technology to manufacture a nuclear weapon.<sup>20</sup> Whether or not the choice is made to build a nuclear weapon will depend on an assessment of the geopolitical climate at that time.

### A THAWING OF MILITARY TO MILITARY RELATIONS?

In September 1977, Brazil terminated all its bilateral military agreements with the United States, mainly over the

United States' public condemnation of Brazil's human rights policy and opposition to Brazil's nuclear program. There is recent evidence that there is a thawing of relations and interest in building a new relationship with the United States Army. In 1985, the Secretary of the Army visited Brazil, followed in May by the Training and Doctrine (TRADOC) Commander. For the purpose of participating in Army-to-Army staff talks; and in late July the Undersecretary of the Army conducted a two day technology seminar attended by approximately twenty-one industrial leaders and senior Brazilian Army staff officers. The Chief of Staff of the U.S. Army also offered, one permanent student seat at the United States Army War College and two student seats at the Command and General Staff College, and an opportunity to have a Brazilian liaison officer at the Army Aviation Center, at Fort Rucker, Alabama.<sup>21</sup> These may also be Brazilian instructors at West Point, Annapolis, and the United States Army School of the Americas (Ft. Benning, Georgia).

## CHAPTER IV

### ENDNOTES

1. Defense Marketing Services, Foreign Military Markets: South America/Australia, p. DATA 2. (Here after referred to as DMS)
2. Defense Foreign Affair Handbook, p. 76.
3. DMS, p. Data 2.
4. The International Institute for Strategic Studies, The Military Balance 1986-1987, pp. 180-181.
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6. Ibid., p. Data 2.
7. Ibid., p. Market Overview 1.
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9. "Air Force Studies AWACs, Fighter Purchase", Sao Paulo O Estado De Sao Paulo, in Portuguese, 26 October 1986, as reported in Foreign Broadcast Information Service, Latin America, 29 October 1986, p. D1.
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13. Ibid., p. Market Overview 1.
14. "Brazil Steps Back from race to Build Nuclear Weapons", Washington Post, 28 August 1986, pp. E1 and E3.
15. Ibid., p. Market Overview 1.
16. DMS, p. Market Overview 2.
17. Ibid., p. Market Overview 2.

18. Ibid., p. Market Overview 2.
19. Ibid., p. Market Overview 2.
20. Robert J. Branco, The United States and Brazil, p. 91.
21. Office of Secretary of Defense Latin Affair Division,  
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## CHAPTER V

### OVERALL IMPLICATIONS FOR THE UNITED STATES

#### GENERAL

Brazil is the largest, richest country in South America and will have increasing influence as a military industrial society. It is emerging as a complex sophisticated nation striving to take its place as a world power. But, its not there yet. The impetus to attain this goal comes from within but cannot be accomplished without help from outside sources. Brazil has sought out United States help, but not exclusively. She has accepted help from other nations, both non-communist and communist, all anxious to court this awakening giant. The United States has a unique chance be part of this transformation and continue a solid friendship to last into the future.

#### ECONOMIC

A huge foreign debt, a quarter of which is owed to United States banks, coupled with rising inflation is the nation's main problem. While struggling to meet debt payments, the Sarney government imposed the Cruzado plan as a measure to slow-down rising inflation. This plan has met with much popular criticism and thrust the government into crisis. The president journeyed to Washington in September of 1986 and stated his case to a Joint Session of Congress, asking for a reconsideration of interests rates and affirming he would not mortgage his countrymen's future

or jeopardize his nation's sovereignty because of the debt. Then on 20 February 1987, he made a bold move and declared he was halting the interest payments on the debt owed to lending banks. A move that surely eased the pressure on his government and showed he meant what he said. Brazil can not afford to default on its debt payments, to do so, would damage its credit worthiness and hurt its growth. Further, it would damage the image of a nation striving to attain its "manifest destiny."

Clearly, the United States can not totally underwrite the development of the Brazilian economy. We do, however, have an interest in promoting democracy, free enterprise, world trade and the development of third world countries, especially in this hemisphere. A Brazil that is economically strong, confident and able to pursue its own agenda and maintain a friendly relationship with us is of mutual benefit to both countries. The ties between our nations in commerce, banking, and business are growing.

What can we do to help? If we are truly interested in helping Brazil overcome its current debt problem, we will do our part in renegotiating the interest of our bank loans and put necessary pressure on the international banking system to do the same. We should encourage frank, open and honest dialogue on trade problems, to find ways to mutually drop some of the barriers to free trade.

Because both countries follow protectionist trade policies, a joint forum set up to eliminate some of these restrictions, item by item, may be most helpful. We are Brazil's largest:



trading partner, supplier, source of both finance and foreign investor, in other words, we have a vested interest in seeing that she does well in the world. I think the right words to describe our style in these matters should be "cooperation" and "mutually beneficial," a relationship that should be friend to friend rather than father to son.

#### DEFENSE/SECURITY

The Brazilian military until 1983, have been involved in running the country. Because of the successful transformation from a military run government to a democracy, the military has stepped aside and have concerned themselves with traditional military tasks, that of providing security to the nation. Although still interested in providing security for national borders, the Falklands/Malvinas War has caused the military to increase its attention to external defense. The Falklands/Malvinas War showed how ill prepared South American Armed Forces were to fight that type of conflict and how disruptive a conflict in the South Atlantic could be to the Brazilian economy. A conflict in the South Atlantic could probably occur as a result of a global east west conflict or one that involves Middle East oil.

The military modernization program is largely a result of the Falklands/Malvinas War and is focusing on external defense. Although most of the equipment to modernize will come from its own arms industry, the opportunity for the United States to affect this modernization process could come through weapon's technology transfer. Here is an excellent opportunity to

positively impact on our relationship. Even though the mood of the Congress is very protectionist, through careful planning and scrutiny, there should be some technology that we can part with that will not have an adverse impact on our security. We export technology all the time to friendly countries each as Israel and Egypt. We could and should do the same for Brazil. Another area that could have mutual benefits is the coproduction of a weapons system that is not subject to third party transfer prohibitions. A further consideration might be a joint effort in space research, possibly the launching of a satellite. Even though the French are involved now helping to build a modest program, there still appears to be room for other related space programs.

However, the United States does have the opportunity to rebuild its military to military relations and appears interested in doing so. The United States is proceeding cautiously in this area and appears to be pursuing a building block approach to improving military relations, through personnel exchange programs, high level staff visits and talks, and training exercise participation. The Brazilians want to pursue more mature relationship with the United States and do not want to become dependent on us.

The issue of nuclear weapons poses some interesting problems for the United States. Whether or not a nuclear weapon is developed is debatable. There are conflicting reports on the subject. The technology is available in country as well as the means to deliver a device. Brazil is keeping its options open, and may want a device because the possession of one is perceived

as the trappings of a superpower. Should Brazil and/or Argentina pursue the technology and develop a nuclear device for military purposes it would raise serious security questions for the United States. Clearly, we seek the non-proliferation of nuclear weapons and may want to quietly talk the Brazilians out of developing a nuclear weapon in order to promote regional stability. This point may not be open to negotiation. Against what country and under what circumstances would such a weapon be used? Clearly, Brazil is the dominant country in South America and has solved disputes with its neighbors through negotiations. It has pursued a foreign policy of non-involvement and the military does not have the capability to project power intercontinentally. The answer, then is very speculative, but if answered in the affirmative it may be one the United States will have to live with.

Brazil has pursued a policy of maximum economic development and minimum defense. It has been able to pursue this policy because of the relatively secure borders, no real threat from neighboring countries and a policy of non-intervention. Even though the military is modernizing in response to a preceived external threat to national security, it would seem unlikely that Brazil would seek or be receptive to an any increase in external defense relationships with the United States. She does not have the ability to project combat power beyond her borders and it is not necessary for her to do so. The global interests of a superpower do not match with a developing third world country, therefore we can not share the same security interests. We can

however, share in a dialogue that expresses our views on hemisphere and global security.

#### WORLD ORDER

The situation in Latin America and its impact on the United States are of continuing concern. Communist sponsored insurgencies are visible in Guatemala, Honduras, El Salvador, Colombia, Bolivia, Peru, Ecuador, and Chile.

The United States has an opportunity to enhance a long lasting relationship with a country that is destined to be a world power, and one that could, if it chooses, a dominant influence for democracy and development in South America. Choosing not to become involved Brazil has focused its attention on internal problems. It has participated the Contadora process, but only as a member of the support group. It has shied away from any leadership role on the continent and appears unready to assume such a role. But it is a shining example of what can be done; how to peacefully transition to a democracy. We share many of the same goals; peace in the world, democratic government, free trade, a high standard of living and a good quality of life for our people we must be careful not to use our standards as criteria for success. The Brazilians have not forgotten President Carter's conduct in response to human rights and the nuclear question. We should encourage maximum exchange of ideas and joint interface in such areas as: cultural exchanges, journalist interchanges, educational programs, scholarship programs, congressional visits, and the like.

A strong, viable democratic cooperative Brazil is one of the best ways of preserving and promoting world order in Latin America. The Brazilians expect and deserve to be treated as an equal in its dealings with the United States over issues that are of mutual concern and mutual benefit.

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